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ABSTRACT

This literature review describes the major topics covered in the literature on school dropouts between 1988 and 1994, with special attention to the reasons why youth leave school. It analyzes recent literature on these topics, and links this literature to that on intervention programs meant to keep youth in school and prepare them for employment. A synthesis of the literature is organized according to eight categories: (1) reviews of the literature (8 sources); (2) critiques (4 sources); (3) models or theories to explain dropout (9 sources); (4) surveys of dropouts and at-risk students (14 sources); (5) dropout and delinquency (9 sources); (6) dropout and part-time work (5 sources); (7) dropout and school characteristics (9 sources); and (8) intervention programs to reduce dropout (24 sources). The synthesis of these sources suggests that there are many implications for action that can be drawn from research. First, it seems that multiple responses are probably a wiser course than the adoption of a single response. Enough is known about some subgroups to tailor programs appropriately, but more study is required to develop interventions for less often studied ethnocultural groups. The apparent complimentarity of work and school should be studied to learn more about the workplace as a learning environment. Innovative programs to prevent dropout should be studied for the support and education they offer students. An annotated bibliography of the sources used for the literature synthesis is included. (Contains 80 references.) (SLD)

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ED 420 727

DROPPING OUT: A LITERATURE REVIEW, 1988 - 1994

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Introduction

Purposes

The purposes of this literature review are 1) to describe the major topics covered in the literature on school dropouts, with special attention to the reasons youth leave school early, 2) to analyse the recent literature on these topics, and 3) to link this literature to that on the intervention programs meant to keep youth in school and to better prepare them for employment. Taken as a whole, this review provides both direction and support for studies which concerned with reducing dropout rates and enhancing the employability of Canadian youth.

The review is composed of three parts: a synthesis of the literature, an annotated bibliography, and a list of references.

Search Strategy

The review focuses on material published between 1986 and mid-1994 that are indexed in one or more of five data bases and two libraries. The data bases are those of the *Canadian Education Index* (CEI), the *Educational Resources Information Center* (ERIC), *Psychological Abstracts*, the *Ontario Educational Resources Information Service* (ONTERIS), and *Dissertation Abstracts*. The libraries are those of the Canadian Education Association and The Ontario Institute for Studies in Education. Using the key words "dropout(s)", and "decrocheur(s,es)" over 700 individual items were identified. Based on the titles, abstracts included within the data bases, and the availability of original material, a selection was made of approximately 70 items that provide broad coverage and are of good quality. In addition, personal records related previous research on dropouts were consulted to provide additional depth to the review.

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Classification of the Literature

The literature on the topic of school dropouts has become vast; without an organizing framework it is easy to become lost in the detail. Based on our review, the following eight categories appear appropriate to give appropriate focus to the review: 1) reviews of the literature, 2) critiques, 3) models or theories to explain dropout, 4) surveys of dropouts and at-risk students, 5) dropout and delinquency, 6) dropout and part-time work, 7) dropout and school characteristics and 8) intervention programs to reduce dropout.

Part I: Synthesis of the Literature

Organization

The synthesis of the literature is organized according to the eight categories identified above; the following annotated bibliography of the references selected uses the same structure. When an item could be cited in two or more category, it has been cited in each category. For each item, the following information is given: author; title; name of journal, volume and page number (if applicable); city and publisher (if applicable); year of publication; name of funding agency (if known/applicable); and province or country of research; number of pages; number of tables and figures; and appendices.

Nature of the Problem

Sooner or later, all students leave school. If they do so at a time when their personal goals are met and they can move to productive lives as adults, then both they and society are the better for it. If they leave too soon, however, they may find that they lack the skills, attitudes, and knowledge necessary for employment or further education. At a time of rapid social and economic change, this situation is a personal tragedy that can lead to social deviance and problems with mainstream society that may never be resolved.

The recent literature on dropouts in both Canada and the United States take it as a given that dropping out of secondary school is to be avoided, if not condemned. While confirming earlier findings about why youth drop out of school, this literature includes more fine-grained analysis that focuses on particular groups of students in particular locations. These studies reveal that the generalizations characterizing earlier research rarely apply to specific subgroups. Males differ from females; francophones differ from anglophones; rural from urban, etc. As well, careful analyses of the process of dropping out (and it is a process, not an event) indicate that the kind of impact particular events have on the likelihood of one's completing school are usually contingent on other events and conditions. To

explain these complex relationships, a series of theories or models have been developed and tested. Using these models, it may be possible to create policies that are more predictable in their effects than those previously enacted.

Policies aimed at reducing dropout rates have often been controversial. A major Ontario study by George Radwanski (1987) emphasized the relationship been streaming students into academic tracks and dropout rates, and called for the elimination of streaming. Critics (e.g., Allison & Paquette, 1991; Black, 1988; and Townsend, 1988) condemned his analysis, arguing that he had confused correlation with cause and effect. Other commentators, however, agreed with Radwanski (e.g., Buttrick, 1989) and, seemingly in compromise, the government of the day moved toward policies that would see Ontario schools eliminated streaming in grades 9 and 10. As well, numerous interventions (mentoring, counselling, etc.) have been tried to improve student persistence in school, and some propose radically new schools to address the problems educational systems currently face. Evaluations of such programs are increasing in number and there growing evidence that more holistic initiatives have succeeded in reducing dropout rates or improving employability.

The following paragraphs summarize and, to a degree, synthesis the references identified in the eight categories of literature identified; namely: 1) reviews of the literature, 2) critiques, 3) models or theories to explain dropout, 4) surveys of dropouts and at risk students, 5) dropout and delinquency, 6) dropout and part-time work, 7) dropout and school characteristics and 8) intervention programs to reduce dropout.

Reviews

Reviews of the literature generally accompany studies of student dropout. The eight reviews considered here are part of comprehensive analyses (Radwanski, 1987; LeCompte & Dworkin, 1991; Morris, Pawlovich & McCall, 1991; Manitoba Department of Education and Training, 1993; and Office of Educational Research and Improvement, 1993) or of special analyses of the literature on specific groups, (Fernandez & Shu, 1988 on hispanic youth in the U.S., Mackay & Myles, 1989 on native student dropouts in Canada, and Wolman, Bruininks, & Thurlow, 1989 on dropouts among special education students). Most reviews focus on why students drop out, and provide frameworks for categorizing the literature on dropouts, particularly reasons for dropping out. Radwanski, for example, cites that latter as being school-related, work-related or personally related. Mackay and Myles use four categories: family background, personal characteristics and attitudes, academic achievement, and school climate. Morris et al. link characteristics of learners and individual factors. A few, including both Office of Educational Research and Improvement and LeCompte and Dworkin, review theoretical models. Those dealing with special populations provide evidence as to how the specific groups differ from the populations at large in terms of their dropout rates, reasons for dropping out, and response to initiatives meant to reduce dropout rates.

Critiques

The four *critiques* are related to the 1987 Radwanski report in Ontario (*Ontario Study of the Relevance of Education, and the Issue of Dropouts*); one, Allison and Paquette (1991), in fact includes a number of critical essays that emphasize various aspects of Radwanski's work. Although directed to Radwanski's work, the critiques also speak to issues recurring throughout the dropout literature, such as the impact of streaming, the need to attend to ethno-cultural and gender differences, and the question of whether or not dropping out is, in fact, a handicap in the job market once other factors are taken into account. Underlying a number of criticism is a challenge to the centralized, technical-bureaucratic approach to solving educational problems evident in much of the literature. Alternative paradigms, including market choice and empowerment of minorities, are suggested.

Theories of Dropout

The nine citations for *models or theories* to explain dropout are among the more important. It is generally conceded that the dropout literature is theoretically impoverished; most studies assume, implicitly or explicitly, a simple cause-effect model of behaviour in which correlation implies causation. In a typical study, a score of variables might be correlated with dropout rate and those with the highest correlations (all other things being equal) would cited as "causes" of dropout. Even experimental studies tend to be a-theoretical; a particular intervention is suggested, implemented, and evaluated in terms of its effects.

Four theories or models are cited most frequently. The frustration - self-esteem model (Finn, 1988) postulates that students who do not well become frustrated in school; as a result, their self-image declines, and a downward cycle develops that results in dropout.

The participation-identification model (Finn, 1988), postulates that involvement in social activities results in identification with and social attraction to a group; conversely, a lack of participation results in a lack of identification. By implication, students who are marginal for various reasons (member of an ethnocultural minority, a poor reader, a poor athlete) may become distant from mainstream groups, become isolated, then alienated, and finally drop out. Tinto's model for postsecondary student attrition, which posits a similar mechanism emphasizing the student's motivation for remaining in school, was substantially confirmed by Norquist (1993) and Stage (1989).

Deviance theory, utilized by LeCompte and Dworkin (1991), holds that if individuals fail to support an institution's norms, even though they are not rebellious, they may be classed a deviants by the institutions and treated as such. Such persons may then redefine themselves in terms of deviant behaviour, and drift toward activities that offer rewards that outweigh the burdens imposed by social constraints and

institutional sanctions. Dropouts, who usually have a history of absenteeism, poor academic performance, and the like, may by treated as "deviants" by schools and effectively "pushed out".

In addition to these three models, several other frameworks for explaining dropouts appear in the literature. LeCompte and Dworkin (1991) theorize about the link between structural strain on institutions and the behaviour and attitudes of their employees and clients. If societal changes reduce the fit between the institution (school) and society, its employees (teachers) and clients (students) perceive their efforts and participation as purposeless. Alienation and dropout can result--for students and teachers. This strain model helps to explain why youth (and staff) may not embrace institutional norms.

Manski (1989) and Bickel and Papagiannis (1988) use cost-benefit models to explain student retention/dropout. Manski argues that the average expected gain in income as a result of completing school is the appropriate criterion for assessing the effectiveness of an educational institution, not its dropout rate. His model assumes that uncertainty exits and that it is impossible to know *a priori* which students will complete and which will drop out since the relative costs and benefits of a complete postsecondary education for each of these students is not known in advance. Although Manski doubts this model is applicable to secondary education due to the latter's compulsory nature, he overlooks the fact most students leave secondary school past the age of compulsory attendance. Bickel and Papagiannis (1988) place emphasis local economic environments and suggest high school students are more likely to complete when doing so will enhance their employability and income, and will not complete when local conditions make employment unlikely regardless of educational level.

Finally, Lawton et al. (1988) developed a grounded theory for dropout that emphasize a number of themes in the lives of youth that guide the process of dropping out: school system, social, and maturational themes may coincide to lead some students to a marginal place in the school and, ultimately, dropout. This fine-grained analysis reflects a combination of deviance and participation-identification models, but emphasizes the individual's need for identity, meaning, and personal development.

Surveys

The fourteen *surveys of dropout* focus on who dropouts are and their reasons for dropping out of school. Four of the surveys are linked to Ontario's dropout initiatives of the late 1980s (Karp, 1988; King, et al., 1988; Mackay & Myles, 1989; and Sullivan, 1989). The studies of the Quebec Ministry of Education (1991) and Statistics Canada (1991) extend this work. Significant analysis of dropout data for the U.S. are based on two longitudinal studies, the High School and Beyond (HSB) surveys of the late 1970s and early 1980s, and the National Educational Longitudinal Study

(NELS) which recently released data on the transitional years (grades 8 to 10); a number of studies cited in this review were based on these data bases, including McMillen (1994). Two other surveys cited here focus on family behaviour of dropouts; Lamb (1990) considered certain types of "cultural capital" that Australian parents provide their children and its relation to youth's educational aspirations. Rumberger, et al. (1990) reflect on other types of parental behaviour, and report markedly different child-rearing practices between the parents of dropouts and non-dropouts, after controlling for socioeconomic variables. Three focus on particular minorities, Bowker (1993) and Mackay and Myles (1989) on Native Indians in the United States and Canada, respectively, and Dei (1993) on black youth in Ontario.

Overall, the survey data on why youth dropout is quite consistent, although specific statistics vary due to differences in sampling, in populations, and the way in which questions were asked. The most common reasons cited (in the rank order provided by Statistics Canada, 1991) were as follows: 1) prefer to work, 2) because they were bored with school, 3) problems with school work, 4) had to work for financial reasons, 5) problems with teachers, and 6) because of pregnancy and marriage. King's ranking of reasons was similar (allowing for differences in the wording of questions), but reported poor relations with teachers and administrators as one of dropouts' perceptions of school rather than as a reason for dropping out. Quebec's Ministry of Education (1991) reported a similar ordering of reasons, but included not feeling at home in school as an important reasons for leaving. And Sullivan (1988), grouping reasons as school related, work related, or personal, reported highest frequency for school-related reasons (boredom, problems with teachers, discipline problems, courses offered, and poor grades). In all studies, personal reasons (problems at home, marriage and/or pregnancy, and financial problems) are less importance than the rejection of school and preference for work.

Several of the survey reports provide separate statistics for males and females; pregnancy and marriage are more commonly cited as reasons for leaving among young women, and a preference of work to school was more commonly cited by young men. Data contrasting francophones and non-francophones from Ontario and Quebec suggest that the gender differences may be greater for the former, with young francophone men placing a higher priority on work than either francophone women or the population at large. The survey of native youth indicated that limited English proficiency hinders school work, and encourages dropout, for youth living off reserves.

Delinquency

Nine studies concern *dropouts and delinquency*; most are studies from the United States since little appears to have been done on the topic in Canada. We should not reject the U.S. studies as inapplicable to Canada, as it made clear by the one Canadian study included here--findings are quite similar in many regards. At the same time, the U.S. literature is surprising in the diversity of findings; conclusions break many

stereotypes presented in the media.

Delinquency and dropout are linked in many ways. In broader society, both behaviours are considered deviant, and predictors of one are often predictors of the other. One predictor noted in five studies is aggressive behaviour (Cairns, et al., 1989; Fagan & Pabon, 1990; Finn et al., 1988; Kupersmidt & Coie, 1990; Windle, 1989). Aggressive youth who also are poor school achievers have a very high likelihood of dropping out (89% in one study); even among average achievers, aggressive behaviour is a good predictor of dropout and commission of violent crimes. Runaway is also a form of delinquent behaviour correlated with dropout (Windle, 1989); indeed, like dropout, it can be seen as an act by the individual of rejecting a particular institution--in this case the family.

Some types of delinquent behaviour are about as common among students as dropouts, such as the types of drugs used and sold (Fagan & Pabon, 1990; Hartnagel & Krahn, 1989). Dropouts appear to be more likely to abuse drugs, however, perhaps because they have more time to engage in such behaviour. As well, early motherhood is not a predictor of non-graduation if young women who remain in school; if a young woman has dropped out of school, however, having a child reduces the likelihood of her ever graduating (Upchurch & McCarthy, 1990; 1993; and Anderson, 1993).

Delinquent or deviant behaviour differs between men and women, and among different ethnocultural groups. Young women tend to complete more schooling than males before dropping out, and are less likely to engage in delinquent behaviour after doing so (Hartnagel & Krahn, 1989); the likelihood of young mothers completing high school is related to their ethno-cultural group, with black women most likely to complete, white women slightly less likely, and hispanic women least likely to do so (Upchurch & McCarthy, 1990); and rural black males may be less likely to dropout than rural white males--and both are less likely to engage in delinquent behaviour than are urban dropouts (Cairns, et al. 1989). Generalizations, then, can be difficult or misleading, since personal characteristics, location, etc. can greatly alter the likelihood of dropout and delinquent behaviour.

Hartnagel and Krahn's (1989) study in Edmonton, which looked at "how the labor market may be related to criminal behavior among school dropouts", found more male dropouts were unemployed than female dropouts, and that a third of all dropouts were usually short of money and had been questioned by police. A quarter had been convicted of a non-traffic related crime in the past year. A quarter had also committed on of a number of crimes listed on a crime index; the most common crime was the selling illicit drugs. The authors concluded that male dropouts become part of a "somewhat marginalized world, a world where social controls of a job are absent, where peer group influences are strong, and where free time and boredom combine to increase the opportunities for and temptations to engage in deviant behavior (p. 440)". The percentage who reported selling drugs in Edmonton

was higher than that found in a study of inner-city youths in the U.S. (Fagan & Pabon, 1990), although the time frames were different (the past year in the Canadian study and the past month in the U.S. study).

Part-time Work

The five studies concerned with *students and work* indicate that the relation between part-time work and schools is a strained one. Excessive hours of work (more than 15 to 20 hours per work) are associated with a decline in academic performance, an increase in absenteeism, and dropping out (Steinberg & Dornbusch, 1990; Lawton, 1994; Barton, 1989). However, students who work moderate amounts tend to do better in school than those who do not work or those who work extensive hours. Most, if not all studies, are subject to a selection bias, in which unmeasured variables my explain both students' propensity to work long hours and to do less well in school. Much needs to be learned about what students learn from work (Charner & Fraser, 1988), as indicated by the fact that students who work part-time have greater success at finding jobs after leaving school than those who have been through co-op programs operated by schools (Stone, 1990).

School Characteristics

Nine studies are included that link *dropout and school characteristics*; most of these studies incorporate the assumption that improving schools will reduce dropout rates. The purpose of the studies, in effect, is to determine the types of changes that schools should adopt in order to reduce their dropout rates. Characteristics correlated with low dropout rates include a committed staff, a school-wide emphasis on academic pursuits, an orderly environment, low internal differentiation of program, and smaller school size (Bryk & Thum, 1989; Lawton et al., 1988). Increasing engagement of students by accommodating their needs may increase retention, but may also reduce academic achievement (Miller, Leinhardt, & Zigmond, 1988; Lawton, et al., 1988; McKeown, 1993). Accommodations identified in the reports include individual, group and peer counselling, mentoring, night school, co-operative education, technical preparation programs, elective classes, better cafeteria food, English-as-second-language classes, co-curricular programs reflecting ethno-cultural diversity, etc. (Quirouette, 1989; 1990; Stone, 1992; Tidwell, 1988; Lawton et al., 1988). Quirouette (1989; 1990) provides a self-administered questionnaire for students that can be used both to identify potential dropouts and to assess the need for a response by the school. Solberg (1993) describes application of an instrument to assess the stress students experience.

Although these studies tend to confirm the characteristics of "effective schools" identified in the educational literature, they provide little guidance for implementing school improvement programs. As well, there remains the suspicion that underlying variables, such as the socioeconomic status of the community, may explain the characteristics of more "effective" schools, even

though researchers may try to control for these factors. Finally, one must question whether a "better" high school built on the existing model will address the alienation from and boredom with school that many dropouts report.

Interventions

Twenty-four reports of *interventions directed at improving school retention of students* include three surveys of innovative programs (Agency for Instructional Technology, 1987; Conference Board of Canada, 1991; Ontario Ministry of Education, 1990; William T. Grant Foundation, 1991), twelve reports of carefully monitored intervention programs (Catterall, 1987; Divine & Whanger, 1990; House & Wohlt, 1991; Baizerman & Compton, 1993; Bauer & Michael, 1993; Cave et al., 1993; Francis et al., 1993; Hamby & Monaco, 1993; Mansbach, 1993; Mayer, 1993; Nweze, 1993; Texas Education Agency, 1993); three sets of prescriptions for school and school system improvement (Lawton et al. 1988; Newfoundland and Labrador Department of Education, ca. 1990; Roueche & Roueche, 1994); and three that deal with alternative models of secondary education, one currently practiced (Baldwin, 1990/91) and two of a more speculative nature (Otto, 1988; Leonard, 1992).

The innovative programs and intervention programs tend to describe supplementary initiatives to meet the needs of at-risk or work-bound students. Among these, mentoring, counselling, and academic skill development are the most common. A multi-faceted program matching trained tutors with students at-risk of leaving a postsecondary education institution, and emphasizing learning skills rather than specific knowledge, was reported effective a reducing dropout, whereas more limited counselling and writing skills programs for secondary students were less so. Even effective programs, though, may not be cost-effective (Cave, et al., 1993). Group counselling, it was suggested, might even have negative effects in that group solidarity might be achieved at the expense of academic commitment.

The prescriptions for school improvement tend to aim at more far- reaching change in the culture of high schools, emphasizing a more student-centred, accommodative approach to education than is common in academic, subject-centred schools. Models emphasize openness to information about students (absenteeism, achievement levels, self-image) and a problem-solving approach to school improvement.

Rather than add to or reform existing schools, the third strand of literature advocates the re-invention of secondary schools. The most modest report emphasizes how the different character of night schools in comparison to day schools makes them more acceptable to many students who reject the norms of regular high schools. The more radical authors suggest a thorough de-institutionalization of high schools, with activity-centred programs that rely more on modern information technology and the integration of work and education. The

more modest proposal implies student should have more choice in the type of school they attend and when they attend it, while the more radical proposals imply the replacement of the current standard secondary school with a fundamentally different, but nevertheless standardized, learning environment.

Conclusion

The recent literature on high school dropouts goes beyond the study of the immediate incidence and causes of dropping out. Increasingly theoretical frameworks have been applied to direct both research and intervention. The recurring problem of the links between education and employment which have driven periodic re-designs of formal educational systems since the middle of the last century has once again come to the fore. While the future always seems murky, it does seem that present economic changes are as extreme as any since the industrial revolution. We can no longer be sure that even those who graduate from high school (or college and university) will be employable, or have skills that will long be in demand. As researchers using cost-effectiveness models to explain dropout have suggested, some students may be behaving in an economically rational manner when they quit school early.

Given these circumstances it seems that there are many implications for action that can be drawn from research. First, given the uncertain situation, multiple responses are probably a wiser course to follow than the adoption of a singular response. That is, following the traditional maxim, we ought not place all of our eggs in one basket. Traditional secondary school programs can and ought to be improved; supplementary programs can be mounted and systematically assessed to determine which ones are consistently most beneficial; and a variety of alternative learning environments ought to be developed, tried, and assessed.

Second, enough is now known about some subgroups--females, francophones, native peoples--to tailor programs to their special needs and characteristics; but more needs to be known about other ethno-cultural groups and their interaction with the existing and alternative education systems. As well, programs must be sensitive to their geographic settings.

Third, the apparent complementarity of work and education needs to be built upon; too often now, the part-time worker and part-time student are in conflict with one another, even though they are one in the same. Evidence suggests that the workplace is a learning environment, although we know less about what is learned at work than at school.

The theories or models of dropping out, with their emphasis on frustration, control, participation, and the like, underline the social nature of the process that leads a student to persist or to drop out. Yet, some models for alternative learning environments emphasize individualization, modularized curriculum, and the use

of computers and electronic information retrieval and manipulation. The picture these proposals paint is of a flexible but isolating learning environment, wherein the social contact that appears to be so necessary for engaging students may be lacking. To ensure against educational faddism, reformers would do well to assess any proposal against each of the various models or theories used to explain dropout in order to predict its effects on youth.

Five questions would be worth answering in this process of assessing innovative programs.

1) Will this program provide the individual with valued knowledge, skills and attitudes that offset the cost--in forgone income and effort--he or she must contribute in order to obtain them?

2) Will this program offer students opportunities to engage with others in activities that reaffirm academic, social, and practical values held in high esteem by society?

3) Does this program provide support for for students (and staff) in overcoming frustration, solving problems, and learning appropriate behaviour?
4) Is this program sufficiently flexible to adapt to the specific needs and tastes of individuals, without losing its integrity?

5) If this program is not appropriate for an individual, is there an opportunity for that person to move gracefully and with assistance to another learning environment that may be more suitable?

DROPPING OUT: A LITERATURE REVIEW

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Part II: Annotated Bibliography

1. Reviews of the literature

Fernandez, R. R. & Shu, Gangjian, S. School dropouts: New approaches to an enduring problem. *Education and Urban Society*. 20(4), 1988. Funding: Inter-University Program for Latino Research and Social Science Research Council (U.S.). Location: U.S.

A good review of the literature to 1988 with a special emphasis on the U.S. hispanic population, for which it is noted that dropout rates vary tremendously among subgroups. For students of average achievement level, one national study reported dropout rates of 13% for Mexican Americans, 16% for Cubans, 28% for Puerto Ricans. The average rate was 14%, compared with 10% for all students. Hispanics were less likely to be enrolled in academic programs than all students (21% vs. 31%), but Cuban Americans approached the national average (27%). However, the dropout rate for Cuban Americans enrolled in academic programs were above the national average for students in academic programs (15% vs. 3%). Dropout rates are also linked to marks in school and disciplinary problems, income, father's education, and age. Generally, those from Puerto Rican backgrounds are at greater risk than Mexican Americans, who in turn are a more risk than Cuban Americans. The danger of generalizing to all "hispanic" students is apparent.

LeCompte, M. D. & Dworkin, A. G. *Giving up on school: Student dropouts and teacher burnouts*. Newbury Park, CA: Corwin Press, Inc., 1991. Funding: University of Houston Center for Public Policy; Hogg Foundation for Mental Health, The University of Texas, Austin. Location: U.S.A. 300 pp.; 6 tables; 7 figures.

Linking both the withdrawal of students (dropout) and of teachers (burnout) to systemic problems, the authors suggest a set of adjustments to improve without abandoning current educational systems in the U.S. Currently, they see teachers and principals as too heavily supervised and directed, even while students endure programs that are largely irrelevant to their social and economic needs. To reduce student and teacher alienation, they suggest "schools should be more loosely coupled at the micro or local level as well as within and between the components internal to educational systems--at the level of conditions of teaching and relationships between adults and children in schools--while they should be more tightly coupled at the macro level--or between components of the society such as the labour market, family structures, and professional training" (p. 240). In a "Marshall Plan for education" they suggest improving the education infrastructure (plant, supplies, etc.), accommodating changes to the family structure, instituting flexible scheduling, increasing articulation with social services, providing on-site day care and health services, improving teacher training, instituting better record keeping, teaching for problem solving and intellectual flexibility, using alternative assessment and diagnosis, locating learning in the experience of students, better managing unmanageable students, restructuring school organization, and creating a more professional teaching force.

In their synthesis of the dropout literature they report the reasons for dropping out in four major categories for white, black and hispanic males and females. Among school related factors, dislike of school is most frequently cited for all groups (ranging from 15% for hispanic females to 36% for white males). Males are more likely than females to leave due to expulsion or suspension; among males, blacks (18%) reported this cause, vs. 9% for whites and 6% for hispanics. Third ranked was poor school performance and fourth ranked was that the school was too dangerous. Among economic reasons, a desire to work was most common (14% for males and 5% for females); financial difficulties and home responsibilities were most frequently cited by hispanics. Among females, pregnancy and marriage were cited as follows: 14% and 17% respectively for whites (total 31%); 41% and 4% for blacks (total 45%); and 15% and 15% for hispanics (total 30%).

Mackay, R. & Myles, L. Native student dropouts in Ontario schools. Toronto: Ontario Ministry of Education, 1989. Funding: OMOE. Province: Ontario. 183pp.; 11 tables; 17 figures; 10 appendices including questionnaires.

Appendix 10: Review of the Literature (pp. 146-183) is organized into four major categories and a number of minor categories: 1. Family background: economic status, educational status, and ethnocultural status; 2. Personal characteristics and attitudes: age and gender, psycho-social characteristics, and expectations for education and employment; 3. Academic achievement: marks, grade retention, attitudes and engagement in school; 4. School Climate: ecology, milieu, social system, and culture. Includes 14 references and a three page summary.

Manitoba Department of Education and Training. *Possibilities for practice: An education of value for at-risk students.* The Department, Winnipeg, 1993. Funding: The Department. Location: Canada. 59pp.

The review includes 1) the circumstances and conditions associated with dropout, including academic, school/social, home/school, and personal/social atmospheres; 2) the persona, social and academic factors that lead to at-risk status and the school-related practices researchers have identified that are associated with inadequate skill levels; the factors contributing to students' decisions to leave school; and 4) the range of possibilities for meeting the needs of at-risk students. Includes 79 references.

Morris, S., Pawlovich, W., & McCall, D. *Evaluating the effectiveness of school drop-out prevention strategies: Some suggestions for future research.* Toronto: Canadian Education Association, 1991. Funding: Innovations Program, Employment and Immigration Canada. Country: Canada. 126 pp. + appendices.

This report is a problem-based review of the dropout issue that identifies the nature of the problem, its extent, and how it might be solved. Topics and strategies for future research are identified. A 25 page bibliography is included. Correlates of early leaving include characteristics of learners (family and background factors, parents' education, family size and structure, ordinal position and educational level of siblings, place of birth and ethnicity, urban/rural residence, socio-economic status, and race) and individual factors (academic ability, achievement level, reading ability, program, grade retardation, attendance, transiency, extra-curricular activities, work experience, adjustment and school behaviour). Reasons for leaving cited include dislike of school, poor grades, poor relations with teachers, being expelled or suspended, being offered a job, to help support their family, getting married, and becoming pregnant. Relevant school characteristics included school and class size, program, school climate, and characteristics of teachers. Five prevention strategies, eight intervention strategies, two transition strategies, and one re-entry strategy are identified. Qualitative and quasi-experimental research are suggested to evaluate the effectiveness of different strategies. Seven criteria for improving research are suggested.

Office of Educational Research and Improvement, U.S. Department of Education. *Reaching the goals: Goal 2: High school completion.* Technical Report. OERI, Washington, D.C., December 1993. 131pp.

Argues for reaching beyond temporary and usually tardy palliative programs to address the problem of student dropouts in order to achieve the National Education Goal 2 of a 90 percent high school graduate rate by the year 2000. Part one

summarizes definitions of graduation rates and current rates; Part two defines dropout rates, examines demographics of the dropout population, and explores the reasons student drop out and, sometimes, return; Part three outlines or the origins of the issue, relevant theories and practices, and discussed the problem at the micro-, middle-, and macro-levels; Part four examines current and possible future research on mainstream dropouts, disadvantaged groups, students certification, adolescent employment, adolsescent pregnancy, and dropout prevention programs. Four essays are appended dealing with different perspectives, motivation, a research agenda, and research directions.

Radwanski, G. *Ontario study of the relevance of education, and the issue of dropouts.* Toronto: Ontario Ministry of Education, 1987. Funding: Government of Ontario. Location: Ontario. 213 pp.

Radwanski's review of the literature on dropouts, combined with surveys undertaken on the topic (see Karp and Sullivan), is succinct. In answer to, "Who drops out?", he identified students from lower socio-economic groups, from single-parent families, from lower high school streams, with lower academic achievement, and who work more than 15 hours per week. He classed the causes for dropping out as school-related, work related, and personally related. He clearly placed most of the blame on the school: "Even the complaint that what is taught in school is irrelevant, a frequently-mentioned rationale for dropping out, can best be understood in the final analysis as an alienation-related complaint about teaching methods rather than about subject content. . . . 'A good teacher can make everything seem relevant.'" (p. 95). Radwanski made 22 policy observations and 35 recommendations. His key, and most controversial, recommendations,= included calls for 1) a standard curriculum with no streaming for all high school students and only modest choice of options at grades 11 and 12; and 2) standardized, outcome-based assessment for the curriculum.

Wolman, C., Bruininks, R., & Thurlow, M. L. Dropouts and dropout programs: Implications for special education. *Remedial and Special Education.* 10(5), 6-20 & 50, 1989. Funding: Office of Special Education and Rehabilitative Services and the National Institute of Disability and Rehabilitation Research. Location: U.S.A.

A concise review with excellent tables summarizing 1) student and school factors associated with higher dropout rates and 2) characteristics of studies that considered dropouts in special education. Dropout rates by handicapping condition are given; two groups "have a higher propensity than others to leave school before graduation. These groups are students with learning disabilities and students with emotional disturbances" (p. 14). At risk characteristics for special education student are similar to those for all students. For outcomes, they conclude, "Students with mild

handicapping conditions who drop out of school have a lower employment rate and a lower percentage of time employed since leaving high school than students with handicaps who graduate from high school" (p. 16).

2. Critiques

Allison, D. J. & Paquette, J. (Eds.) *Reform and relevance in schooling: Dropouts, de-streaming, and the common curriculum*. Toronto: OISE Press, 1991. Funding: Faculty of Education, University of Western Ontario. Location: Ontario. 134 pp.

This volume includes nine essays that review and critique "The Radwanski Report", a 1987 policy study carried out by George Radwanski for Ontario's Liberal government that was formally titled, "Ontario study of the relevance of education, and the issue of dropouts." Essays by J. T. Sanders, "From ought to is: Radwanski and the moralistic fallacy" and Maryann Ayim, "Equity in educational reform: A feminist perspective on the Radwanski Report", contend that Radwanski mistakenly inferred that a relationship between dropout rates and streaming meant that enrolment in "basic" or "general" level classes caused many students to drop out. Sanders notes that lower achievement levels can explain both phenomena. S. Churchill and I. Kaprielian-Churchill, in "Ethnicity, language and school retention in Ontario," hold that the surveys by Karp and Sullivan, which Radwanski used to dismiss the importance of ethno-cultural background in explaining dropout, were inadequate to ascertain what they believe to be strong relationships. R. P. Coulter, in "Persistent themes: Some reflections on the history of schooling and work," notes that the aim of making schools more relevant to the world of work have persisted in Ontario since the late 19th century, and that a number of studies indicated such a link is neither necessary nor desirable. Alternative approaches for educating youth should be employed, she suggests, rather than tinkering with the secondary schools. J. E. McPeck, in "Radwanski, dropouts, and thinking skills," suggests one of the key objectives that Radwanski sets--the teaching of thinking skills--is based on a superficial notion of the complexity of human thinking and the tasks individuals undertake to develop such skills. M. Holmes, in "The future of the public school in Canada," rejects Radwanski's liberal, technocratic approach to educational reform as obsolete, being based on models of central control and planning, and argues for a more market-based approach that would support choice, competition, and privatisation. Taken together, the essays raise important issues and identify assumptions that often underlay both research and policy recommendations in the quest for improving schools and reducing student alienation and dropout rates.

Black, K. A response to "Ontario study of the relevance of education and the issue of dropouts". *Ontario Education*. 9-12, May/June 1988. Funding: None. Location: Ontario.

The author challenges several assumptions made by George Radwanski in his report, including the assumption "that all student except those with severe handicaps can benefit from the same programs and are capable of acquiring a common level of skills and knowledge". Black suggests such a single-program education system would raise dropout rates to levels to which they were in the 1950s, when only 40% completed grade 12. Black also argues against the assumption that schools currently emphasize process to the exclusion of content. In any case, he holds that content appropriate to the student should be selected for the teaching of process skills such as how to learn independently. As well, he suggests smaller classes are needed, as are improved teacher training, and perhaps year-round schools.

Buttrick, J. Dropouts and streaming. *Our Schools, Our Selves*. 1(2), 100-108, 1989. Funding: None. Location: Toronto, Ontario.

Buttrick links streaming among schools to school dropout rates, and believes, therefore, that students do not drop out but are forced out. He lists retention rates to the honours diploma for each public school board in Metro Toronto, as well as for Catholic and private schools in the province, and cross-tabulates diploma rates with the extent of "inner city" characteristics of each high school in the city of Toronto. He concludes with a list of top schools and "schools not geared to university", and a plea for publication of performance data of schools in order to bring market pressures to bear on schools in order to force them to improve.

Townsend, M. Dumping: An unfair trade practice - except when it comes to schools. *Ontario Education*. 13-15, May/June, 1988. Funding: None. Location: Ontario.

Responding to the Radwanski Report, Townsend suggests that too much change, not too little, is the problem with Ontario education. Innovations such as the single, 30-credit diploma with optional Ontario Academic Credits for the university bound, is being pronounced a failure even before it is fully implemented. As well, Radwanski's claim that elementary education suffers from too much emphasis on process and a "do your own thing . . . laissez faire attitude toward teaching" misrepresents reality. In fact, individualization and other ideas advocated by the Hall-Dennis report in the late 1960s have not been implemented in practice to the extent they should. He also challenges the notion that all students can master the same body of content, and holds that choice and the credit system do work. Nevertheless, he admits that choice could be delayed until grade 10 or 11, and that vocational schools do sometimes over-enrol children from some groups. Better assessment at admission is his answer to the latter problem. He concludes by condemning Radwanski for its "often unfair and uniformed [sic] criticisms" (p. 15).

3. Models or theories to explain dropout

Bickel, R. & Papagiannis, G. Post-high school prospects and district-level dropout rates. *Youth and Society*. 20(2), 123-147, 1988. Funding: Not indicated. Location: Florida.

The authors test a theory that "dropping out is sometimes better understood as a rational response to social circumstances than as an individual-level manifestation of bad judgment or pycho-pathology. . . . [By] focusing entirely on individual-level factors . . . [such as socialization in the family] we overlook the fact that students make judgment about the larger social environment in which they live . . . . [Dropping] out may be . . . [a] response to an imbalance between rising costs of staying in school and decline returns for that investment of time, effort, and income deferment" (p. 128). They hypothesize that dropout rates will be lower in counties with greater postsecondary education opportunities, since in these cases completing secondary school would have greater long-term value by facilitating easy entry to higher levels of schooling. As well, they hypothesize that high school completion rates will be positively related to average wages and a negative relationship to unemployment rates. Analysis does not confirm the first hypothesis, but do confirm the latter two, implying postsecondary prospects are not an independent factor accounting for high school completion. They conclude, "When a high school diploma promises improved economic opportunity, high school completion rates are enhanced. When a diploma seems irrelevant to post-high school economic opportunities, completion rates are diminished" (p. 144).

Finn, J. D. Withdrawing from school. *Review of Educational Research*. 59(2), 117-142, 1989. Funding: Spencer Foundation. Location: U.S.A.

"This paper describes two models for understanding dropping out as a developmental process that may begin in the earliest grades. The frustration-self-esteem model has been used for years in the study of juvenile delinquency; it identifies school failure as the starting point in a cycle that may culminate in the student's rejecting, or being rejected by, the school. The participation-identification model focuses on students' "involvement in schooling," with both behavioral and emotional components. According to this formulation, the likelihood that a youngster will successfully complete 12 years of schooling is maximized if he or she maintains multiple, expanding forms of participation in school-relevant activities. The failure of a youngster to participate in school and class activities, or to develop a sense of identification with school, may have significant deleterious consequences. The ability to manipulate modes of participation poses promising avenues for further research as well as intervention efforts" (p. 117). The author notes that most interventions are multifaceted in their approach and rarely evaluated in a manner that would allow generalization.

Garrison, D. R. Factor structure of variables associated with dropout: A confirmatory study. *Canadian Journal for the Study of Adult Education*. 4(1), 1-15, 1990. Funding: Not indicated. Location: Canada.

The author validates a five factor model or typology to account for college dropout behavior with 182 first-year college students. The factors are internal motivation, external motivation, capabilities, internal constraints and external constraints.

Lawton, S. B., Leithwood, K. A., Batcher, E., Donaldson, E. L., & Stewart, R. *Student retention and transition in Ontario high schools: Policies, practices, and prospects*. Toronto: Ontario Ministry of Education, 1988. Funding: OMOE. Location: Ontario. 128 pp.; 21 tables; 5 figures.

A number of "themes" in the process of dropping out were identified. School system themes were tracking and sorting (procedures the school uses to acknowledge and work with the differences in the student body), negotiation (informal arrangements in school and class that tend to mediate the more formal procedures of course and class placement), accreditation (the gain and use of credits, the currency of high school), and staff response (means and efforts employed by the staff to respond to the specifics of student behaviour). Social themes were identity (the question of who you are, how special you make yourself, and what you do in school), interests (legitimate amusements in school and out), and non-attendance (alternatives to going to class and the patterns of skipping). Maturational ("butterfly") themes were sexuality (the emergence in school of social and physical relationships between boys and girls, and labouring (working for pay). The final, and integrative, theme was Becoming marginal (the long and short of being selected out). Each theme or factor exists as a polarity--toward one extreme students remain in school, which is central to their lives; toward the other they tend leave school, which is marginal to their lives. In sum, "retention seems most likely when teachers get to know their students, when students are encouraged to know and help each other, and when those edging out toward the margins are identified early and pulled back into an ongoing mainstream of acceptable possibilities" (p. 73).

LeCompte, M. D. & Dworkin, A. G. *Giving up on school: Student dropouts and teacher burnouts*. Newbury Park, CA: Corwin Press, Inc., 1991. Funding: University of Houston Center for Public Policy; Hogg Foundation for Mental Health, The University of Texas, Austin. Location: U.S.A. 300 pp.; 6 tables; 7 figures.

To explain student dropout (and teacher burnout), LeCompte and Dworkin emphasize structural strain and alienation. Schools and those in them, they believe, are greatly challenged by major changes in society such as the breakdown of families, the feminization of poverty, teenaged motherhood, the loss of value of

educational credentials due to economic changes (including the rise of illegal economies such as that based on drugs), the loss of white ethnic hegemony, the impact of science and technology, and increasing levels of "acceptable" violence. When institutions, such as schools, do not adapt quickly enough, "individuals will be unsuccessful in attaining either career and life goals that they set for themselves or the goals that the institutions hold are attainable through conformity with the norms espoused by the institutions. Eventually, individuals come to recognize that the failure they experience is due to flaws in the institutions rather than personal shortcomings. . . . [I]ndividuals may elect to reject the institutions and the normative systems that support them--they may give up on the institutions" (p. 145). They describe how strain theory, and key concepts such as alienation, powerlessness, meaninglessness, normlessness, and isolation, can explain why students and teachers "give up on school" because there is too great a gap between the reality they live and the expectations "society" has promised. Dislike of school, a frequently cited reason for dropping out, implies that school is meaningless and that students are powerless "to effect changes that would make it more meaningful" (p. 163). For teachers, the gap is created by "the discrepancy between expectations engendered during preservice training in colleges of education and actual experiences in classroom settings [and] . . . between the degree of autonomy expected as a professional and the actual amount of autonomy granted to teachers as semiprofessionals" (p. 164).

They also provide a model for the process of dropping out which is based upon research on deviance; the latter holds that individuals initially fail to support a particular set of norms that are opposed to deviant behaviour, even though they do not support deviant behavior per se. Once they engage in deviant behaviour, however, they are classed as deviants and drift toward greater deviance. If youth conclude that "sanctions against rule violation are less punishing than the costs of rule conformity", then they redefine their roles in terms of such deviations (pp. 174-175).

Finally, the authors integrate strain theory and the concept of drift and the loosening of social constraints to yield "a distinctive theory of giving up on school, which they illustrate with examples for both students and teachers.

Manski, C. F. Schooling as experimentation: A reappraisal of the postsecondary dropout phenomenon. *Economics of Education Review*. 8(4), 305-312, 1989. Funding: National Assessment of Vocational Education. Location: NA.

The author develops a mathematical model for quantifying the relative costs and benefits of enrolling in a postsecondary, even while knowing many students do not succeed. He concludes that one cannot judge a postsecondary educational institution by its dropout rate, but only by the expected economic gain for the average enrollee. This gain, of course, will depend on many factors external to the individual and institution. By implication, postsecondary student financing should be as concerned with getting individuals to enrol as with getting students to

graduate--and proposals to adopt graduation-contingent student financing must be rejected. The author suggests this model does not apply to secondary school since the latter is compulsory.

McPartland, J. M. *Dropout prevention in theory and practice.* Center for Research on Effective Schooling for Disadvantaged Students, Baltimore, MD, 1993. Funding: Office of Educational Research and Improvement. Location: U.S. 36p.

A four-fold model of student motivation is linked to students remaining in school and working harder. The categories are: opportunities for success in schoolwork, the human climate of caring and support, the relevance of the school to a student's community and future, and the help given to students in resolving personal problems. The authors argue more intense reforms are needed that would change the roles of students and teachers with a greater emphasis on care and support.

Nordquist, E. D. Missing opportunities: Drop-outs and a failure to find a mentor. Paper presented at the Annual Meeting of the Western States Communication Association, Albuquerque, NM, February 14, 1993. Funding: Oklahoma State Regents for Higher Education. Location: U.S. 36pp.

Evaluate's Tinto's longitudinal model for student attrition by examine recent college dropouts perceptions of their experiences. In all, 18 students (12 female and 6 male) were interviewed. The interviews supported Tinto's model in that the students viewed their leaving in terms of isolation and incongruence. They say faculty-student interaction as critical and mentoring relationships having most impact on social integration and student retention. However, gender and family background were important variables, arguing against Tinto's position that personal variables are less significant in dropout decisions.

Stage, F. K. Motivation, academic and social integration, and the early dropout. *American Educational Research Journal.* 26(3), 385-402, 1989. Funding: Arizona State University. Location: Arizona State University.

Stage expands and tests the Tinto model for college dropout by including measures of student motivation (social relationships, external expectations, social welfare, professional advancement, escape, stimulation, and cognitive interest). The Tinto model of college attrition holds that students experience a "series of changing commitments and experiences affecting [their] . . . integration and, ultimately, decisions to withdraw from or continue in the institution" (p. 387). Constructs used include background characteristics, initial commitments, academic integration, social integration, later commitments, and persistence. "Patterns of persistence

differed markedly among . . . three subgroups. The cognitive subgroup . . . least resembled the Tinto model. This finding is supported by other research which indicates that the academically gifted student . . . may not persist despite good grades. For the Certification subgroup, "male students with a high degree of commitment to the institution were more likely to persist, whereas for minority students social integration was an important predictor of persistence" (p. 396). The "Community Service subgroup most closely resembled the Tinto model as originally described; academic integration influenced persistence indirectly through later goal commitment, and social integration influence persistence through institutional commitment" (p. 399.)

4. Surveys of dropouts and at-risk students

Bowker, A. *Sisters in the blood: The education of women in Native America.* Education Development Center, Inc., Newton, MA. 1993. Funding: Office of Educational Research and Improvement, Department of Education, Washington, D.C. Location: U.S. 360pp.

The book considers factors affecting the success and non-success of American Indian remail students. Part 1 includes, a summary of the dropout problem, the history of the American Indian education, racism and stereotyping of Native Americans, statistics on American Indian dropouts, and Indian dropout theories focussing on personal problems, family backgrounds, and school factors. Part 2 details interviews with 991 women living on American Indian reservations, including dropouts, high school graduates, and college graduates. Part 3 summarizes the findings and offers recommendations.

Dei, G. J. S. (Re)conceptualizing "dropouts" from narratives of black high school students in Ontario. Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta, GA, April 12-16, 1993. Funding: ?. Location: Ontario, Canada. 41pp.

This study uses students' narratives of experiences in a inner-city public schools to explore the influences of race/ethnicity, class, gender, power, and social structures on dropout out of high school. Over 100 students including 22 dropouts were interviewed. It is argued understanding must be grounded in the institutional policies and practices of exclusion and marginalization that organize public schooling and structure the off-school environment of some students.

Karp, E. *The drop-out phenomenon in Ontario secondary schools.* Ontario Ministry of Education, 1988. Funding: OMOE. Province: Ontario. 221 pp.; numerous tables; questionnaires.

Report of a study of data collected from 12 focus groups, 10 interviews with experts, and a telephone survey of 900 drop-outs and drop-backs, 100 graduates, 200 parents, 100 employers, and 200 elementary and secondary teachers selected using quota sampling. Dropouts are described as non-academic, short-range planners, hands-on-learners, frustrated learners, concrete rather than abstract thinkers, less inclined to value education than graduates, reward- and work- driven, alienated, general level students who are loyal, but low in self-esteem and self-confidence. Major reasons for dropping out include: academic frustration, a perception that schooling is irrelevant to "real life", greater satisfaction from part-time work than from school. Secondary causes were a weak home environment (e.g., single-parent family), a low value placed on education by parents, family problems, pregnancy, personal trauma, a rebellious nature, low self-esteem, a minority background, large class sizes, boredom with school, high transiency, and a desire to try a different life. Minor causes were the credit system, semestered schools, inappropriate program level, language difficulties, gender, and enrolment in basic level classes. Half of all dropouts returned to school, but only 29% of these receive a diploma.

King, A. J. C., Warren, W. K., Michalski, C., and Peart, M. J. *Improving retention in Ontario secondary schools.* Toronto: Ontario Ministry of Education, 1988. Funding: Ontario Ministry of Education. Province: Ontario. 144pp. Includes 34 tables; 14 figures; bibliography.

Students in 16 high schools from across the province were studied, with a focus on their credit accumulation, part-time work, and dropping out. "The vast majority of school-leavers are far behind their peers in accumulating necessary credits for graduation. Forty percent of them are behind eight or more credits. . . ." (p. 18). Dropouts' perceptions of schools were quite negative: 33% reported a lack of relevance or that they did not like their courses; 22% reported poor relationships with teachers or administrators; 10% did not like their school's atmosphere; 8% reported difficulty with course-work; 5% reported having no friends; and 3% disliked everything about school. They left school for a variety of reasons: to take a job, 33%; because they were bored with school, 26%; due to family and personal problems, 13%; due to poor attendance and being behind in earning credits, 8%; because they disliked the level of difficulty of their courses, 5%; because they could not get the right courses, 4%; due to pregnancy or marriage, 4%; and because they were too old for the school, 3%. Data are presented on the hours and rate of pay that students work; for those of age 18, 70% reported working; service jobs were most common; 85% worked for personal spending money; 68% worked 16 or more hours per week; there was some decline in course marks for those working over 15 hours per week. The authors conclude that part-time work has little affect on students' academic work.

Lafleur, B. *Dropping out: The cost to Canada.* Conference Board of Canada, Ottawa,

Ontario. Report 83-92-E. March 1992. Funding: Employment and Immigration Canada. Location: Canada. 26pp.

The study estimates the cost of Canada's 137,000 secondary school students who dropped out in 1989 to Canada's economy to be $4 billion. Each individual dropout will lose nearly $129,000 in today's dollars over his working lifetime while a female will lose $107,000. The rate of return to society of investing in a secondary school education is estimated to be 19% for males and 18% for females.

Lamb, S. Cultural consumption and the educational plans for Australian secondary school students. *Sociology of Education*. 62, 95-108, 1990. Funding: Not indicated. Location: Melbourne, Australia.

Cultural consumption is defined as the selective consumption of "high" culture activities, such as going to the theater and attending concerts, art exhibitions, and museums, that has direct relevance to schooling and attainment. For a sample of Melbourne secondary school students (148 boys and 210 girls) in public and private (Catholic and non-Catholic) schools, the author links parents' education, school type, cultural consumption, orientation to school, and educational aspirations. "Results indicate that cultural consumption has a major impact on the educational aspiration of boys. . . . [It] was found to have less of an impact on girls' plans to obtain higher education. . . . Many more girls than boys plan to enter higher education and have fewer alternative plans open to them. . . . [F]urther educational research needs to identify the nature of those demands on learning in which dominant status culture is translated into the academic culture and to investigate how these demands come to be legitimated through patterns of cultural consumption and political control" (p. 107).

Mackay, R. & Myles, L. *Native student dropouts in Ontario schools*. Toronto: Ontario Ministry of Education, 1989. Funding: OMOE. Province: Ontario. 183 pp.; 11 tables; 17 figures; 10 appendices including questionnaires.

A survey of native student dropouts describing the incidence and perceived causes of the problem of native dropout. Approximately one-third to one-half of native students in Ontario are expected to receive graduation diplomas, although retention to grade 12 has increased to 67%. Causes of dropout emphasize limited language skills, low marks, high enrolment in general and basic programs, and slow accumulation of credits. Perceived causes differ between students on and off reserves, with the need for English language skills perceived as being of greater importance by parents of off-reserve students. Includes a review of the literature emphasizing studies about native students.

McMillen, M. et al. *Dropping out of school: 1982 and 1992.* Issue Brief. National Center for Education Statistics, Department of Education. Washington, D.C., August 1994. NCES Report No. NCES-93-901. 3pp. 3 figures.

Data for two NCES studies, the 1980-82 High School and Beyond (HS&B) survey and the 1990-92 National Education Longitudinal Study (NELS:88) of 1988, were analysed, indicating a 43 percent decline in the percentage of grade 10 students leaving school; the rate for NELS:88 was 6.2 percent for the sophomore cohort of 1990. Dropout rates for hispanics were higher than those for whites or Asians; rates for blacks were between those for hispanics and whites.

Quebec Ministry of Education, *L'école. . . facile d'en sortir mais difficile d'y revenir.* Quebec: Ministry of Education, 1991. Funding: Quebec Ministry of Education. Province: Quebec. 118 pp.; 51 tables; bibliography; questionnaire.

This report describes the results of 1) a questionnaire survey of 1242 persons, 2) individual interviews with 118 individuals (58 dropouts and 60 students in grade 11, the terminal year in Quebec), and 3) two group interviews. Social and demographic characteristics of dropouts are provided (e.g., age at dropping out, sex, region, family structure), followed by their school experiences (e.g., their interest in school, their perception of teachers, and their reasons for leaving school). Key reasons for quitting school included preferring to work (58%), failing marks (48%), a dislike for courses (46%), a need for money (45%) and not feeling at home in school (42%). Males place a higher emphasis on work, money, and a dislike for classes, while females emphasized doing poorly in school along with a desire to work. After leaving, 75% of the dropouts had located a job within four weeks; those who had worked while going to school found jobs more easily than those who had not. Males were more likely to be employed in the primary (7%) or secondary (27%) sectors of the economy than were females (2% and 7% respectively). About 50% of the males and 89% of the females were in the tertiary (or service) sector. Since wages are highest in the first two sectors, male wages tended to be higher than those for females. Males also tended to work more hours per week. Finally, the report explores the educational and career aspirations of the respondents; 71% expect to finish secondary school and many expect to obtain technical or higher education.

Rumberger, R. W., Ghatak, R., Poulos, G., Ritter, P. L., and Dornbusch, S. M. Family influences on dropout behavior in one California high school. *Sociology of Education.* 63, 283-299, 1990. Funding: Stanford Center for the Study of Families, Children and Youth and the Spencer Foundation. Location: San Mateo, California.

Families were assessed on their decision-making pattern (relative influence of youth and parents), parenting style (authoritarian, permissive, authoritative),

parental reaction to grades, parents' educational involvement, student's educational involvement, and other variables (e.g., educational expectations, part-time work). The authors conclude, "Compared to other students, even other students who have similar demographic and grade profiles, dropouts are more likely to come from families in which they have to make decisions on their own and in which their parents are less involved in education" (p. 283).

Sarkar, G. SIAST retention study. Factors affecting retention of first-year students in a Canadian technical institute for applied science and technology. Paper presented at the Canadian Institutional Researchers and Planners Conference, Vancouver, BC, March 3-6, 1993. Funding: ? Location: Saskatchewan, Canada. 20pp.

A survey of 2,822 students with 1,557 respondents revealed that working conditions and personal interest/aptitude were more important to noncompleters in determining career choices. They were less certain about career choices, expressed less goal commitment, and set lower educational goals. They used tutorial help, counselling, and computer and library facilities more than completers. They were more like to have disabilities, be female, be married, have dependent children, and be more influences by the economy. In general, student retention was highest in programs where unemployment rates were greatest, contracting the hypothesis proposed.

Statistics Canada. *School leavers survey*. Ottawa: Education Culture and Tourism Division, Statistics Canada, 1991. Funding: Employment and Immigration, Canada. Nation: Canada. 9 pages; 9 tables; 4 figures.

The introduction to this preliminary report states, "The School Leavers Survey explores environmental, social, attitudinal, personal and economic factors that may contribute to the early departure of students from school. As well, it compares the labour market experiences and quality of life of early school leavers with the experiences of those who graduated from school." This summary focuses on "why students leave, their satisfaction with leaving, their employment status, the likelihood of their returning to school and the overall distribution of leavers by gender and province." The survey was conducted between April and June of 1991 and included 9,460 respondents. The Canada-wide dropout rate is estimated at 24% (28% males and 19% females), ranging from 16% in Alberta to 27% in Quebec. Reasons cited for leaving are as follows: preferred work to school (22%, 28% for males and 10% for females), boredom (20%, 19% for males and 22% for females), problems with school work (8%), had to work for financial reasons (8%), problems with teachers (6%), and pregnancy/marriage (9% for females, not given for males). While dropouts did less well at school that those who remained, they did not report having had failing marks; however, they were much more likely to have failed a

grade in elementary school (42% vs. 12% for males and 28% vs. 5% for females) . Of the high school graduates, "just 7% are unemployed. Of the non-completers, over 20% are unemployed." About half of those who drop out at some point in time return to school, but among graduates, only 5% report having left school at some time before graduation.

Sitlington, P. L. & Frank, A. R. Dropouts with learning disabilities: What happens to them as young adults? *Learning Disabilities Research and Practice.* 8(4), 244-52, 1993. Funding: ? Location: U.S.

A follow-up study of 101 learning disabled dropouts are compared with learning disabled students who graduated after they were out of school for one year. Comparisons include employment rates, occupational status, hours worked, wages and benefits, further schooling, and usefulness of high schools. Gender differences are described.

Sullivan, M. *A comparative analysis of drop-outs and non drop-outs in Ontario secondary schools.* Ontario Ministry of Education, 1989. Funding: OMOE. Province: Ontario. 68 pp.; 39 tables.

Results of a telephone survey of 1,400 Ontario residents (700 dropouts and 700 graduates) who attended secondary school in the province and who were between the ages of 18 and 30 at the time of the survey. Objectives included determining the reasons for dropping out and its long term consequences. Data are reported for males and females, and for "Ontario-wide" and franco-Ontarians. Graduates valued education more than dropouts and perceived that they obtained a higher quality of education than did dropouts. Negative factors were the attitudes of teachers, lack of depth of courses, irrelevance of courses, and a dislike for school. Dropouts were more likely than graduates to have been enrolled in general and basic level courses; they received lower marks but reported they were not failing; most dropped out after age 16 (median 16.6). Dropouts left school for reasons that were school related (43%), work related (27%), or personal (23%). School related reasons included a lack of interest, dislike or boredom (24%), problems with teachers (7%), discipline problems (4%), courses offered (4%), and poor grades (4%). Personal reasons included problems at home (12%), marriage and/or pregnancy (7%), financial problems (3%), and moving (1%). Francophones were more likely to leave school for work related reasons but less likely to do so for family reasons. Females were more likely than males to leave school for marriage or pregnancy (14% vs. 1%), but less likely to leave for work related reasons (18% vs. 36%). At the time of the survey, 87% of male dropouts were employed full- or part-time; 78% of the females were employed or were homemakers. Eight percent of dropouts were unemployed vs. 2% for graduates. Median personal income was $18,703 for dropouts and $22,705 for graduate

5. Dropout and delinquency

Anderson, D. K. Adolescent mothers drop out. *American Sociological Review*. 58(5), 735-38, October 1993. Funding: ?. Location U.S.

Argues that Upchurch and McCarthy (1990) are wrong in stating that young mothers are at no greater risk than other young women of failing to graduate from high school.

Cairns, R. B., Cairns, B. D., & Neckerman, H. J. Early school dropout: Configurations and determinants. *Child Development*. 60, 1437-1452, 1989. Funding: Spencer Foundation and others. Location: North Carolina.

A sample of 475 subjects (248 girls and 227) boys were studied over five years from 1983-84, when they were in grade 7, until to 1987-88
Interviews were conducted with 99% (467/472) of the subjects who were alive in grade 11. Dropout rates for whites were 20% for males and 10% for females; for blacks they were 11% and 10% respectively. Being "unpopular" with peers in grade 7 was not a correlate of dropping out and, although a higher proportion of black males (58%) were a year or more behind in grade 7 than were white males (28%), the latter had a higher dropout rate for this southern U.S., non-urban sample. The authors suggest that the location, lack of employment opportunities for blacks, and local norms may account for the greater persistence in school of black males, a group normally associated with high dropout rates in urban and national samples in the U.S. The most significant findings concerned students who, at the start of the study, had been identified as being at high risk for aggressive behavior by two or more teachers/administrators. The dropout rate for boys in this group who were also were low achievers was 82%; the next highest dropout rate, 36%, was for aggressive students of average ability.

Fagan, J. & Pabon, E. Contributions of delinquency and substance use to school dropout among inner-city youths. *Youth and Society*. 21(3), 306-354, 1990. Funding: National Institute for Juvenile Justice and Delinquency Prevention, U.S. Department of Justice. Location: Six inner-city neighborhoods in U.S.A.

Multi-stage cluster samples of high school students (n = 200 per school) and "snowball" samples of high school dropouts (n = 50 per city) were drawn for six inner-city neighborhoods in 1985. Respondents ranged from 13 to 20 and were predominantly black and hispanic. Surveys measured self-reported delinquency, drug problems, drinking problems, and reasons for dropping out (dropouts only). Reasons reported for dropping out included the following: lost interest (51%), too much homework (24%), getting along with teachers (18%), health problems (31%),

pregnancy (females only, 19%), trouble at home (22%), need a job (46%), trouble with students (14%), drug or alcohol problems (6%), suspended (25%), expelled (8%). According to reports of school experiences, "male dropouts have the weakest school attachment. . . . School strain also was higher for dropouts than students. Here, female dropouts indicated the highest strain or blocked educational opportunities. . . . Male dropouts reported higher rates of their own drug problems in school, more often attended school high or drunk, and had higher school crime rates" (p. 327). Serious delinquency was described for 42% of male dropouts vs. 16% of male students; the difference for females was less marked. Violent activity was reported by 26% of male dropouts vs. 6% of male students. Dropouts were more likely to use alcohol or drugs (59%) than were students (36%), but among users there was little difference between the two for the use of alcohol (6% vs. 5%) or marijuana (23% vs. 19%). However hard drugs (cocaine and heroin) were much more common among dropouts than students (30% vs. 12%), and their use of alcohol and marijuana was much more frequent. About 13% of all respondents (male, female, student and dropout) reported selling marijuana once a month or more; students were more likely than dropouts to sell PCP, speed, or pills. Analysis of data on male dropouts showed they score highest for school crime, substance abuse, peer delinquency and perceptions of neighborhood violence, and lowest on family integration, school integration, and social networks. The authors believe an integration "of social control, social learning, and strain theories provide" (p. 339) a valid explanation for student dropouts, although weak findings for school environmental factors suggest forces beyond the school are of greatest importance. For hispanic youth, "weak family bonds, social isolation, and negative peer influences" were especially significant. Social development theory, they suggest, indicated that "the locus of socialization shifts from the family to the school as students enter developmental phases when dropout risks become salient" (p. 340).

Finn, J. D., Stott, M. W. R., and Zarichny, K. T. School performance of adolescents in juvenile court. *Urban Education*. 23(2), 150-161, 1988. Funding: The Spencer Foundation. Location: Erie County, New York.

Data were collected on 91 status offenders ("ungovernable" and "truant") and 13 adjudicated delinquents who were referred by family court to a mental health clinic in 1985. Ranging from 7 to 16 years of age, 67% were white, 28% black, and 5% other; 68 were males and 36 females. Offences differed by race and sex: 76% of whites were ungovernable, 11% were truant, and 13 were delinquent; for blacks, 66% were ungovernable, 24% truant, and 10% delinquent. For males the percentages were 66%, 15%, and 19%, respectively; for females, 83%, 17%, and 0%. The average I.Q. was 95, with no difference among the different offence groups. On average, they were one year behind in reading achievement. Absenteeism average 15% for whites and 23% for blacks, well above the national average of 8%. Forty-one per cent of ungovernable students were failing, vs. 81% for those truant and 23% for delinquents. Twenty-three per cent were enrolled in special education, 45% had

been held back a grade, and 55% had been suspended one or more times. The authors reject the theory that problem behaviour results from low-esteem caused by low-performance in school. Instead, they suggest that involvement in school (attachment or bonding) are important mediating variables. They see solutions in programs that would increase school participation (as measured, especially, by attendance, extracurricular activities, and the like).

Hartnagel, T. F. & Krahn, H. High school dropouts, labor market success, and criminal behavior. *Youth and Society*. 20(4), 416-444, 1989. Funding: Alberta Manpower, Solicitor General Canada, City of Edmonton, and the University of Alberta. Location: Edmonton, Alberta.

In order to understand "how the labor market may be related to criminal behavior among school dropouts", 168 dropouts (51% male) were contacted through employers, other youth already in the sample, social service agencies (including a correction center), school counsellors, employment centers, and government sponsored job search and on-the-job training programs. A crime index of nine items was constructed; labor activity was classified as full-time, part-time, or unemployed. Those in the sample had been out of school an average of 31 months, were aged 15 to 26, over 90% had completed grade 9, and females were more likely than males to have completed grade 11. Fifty-three percent were unemployed, 30% had a full-time job, and 17% a part-time job. More males (65%) than females (48%) were unemployed. About 25% of the unemployed had not held a job for three months or less, and 41% had not held a job within six months. Twenty-eight percent reported they were usually short of money; only 10% lived alone. Thirty-one per cent had been questioned by police and 23% had been convicted of a nontraffic crime in the preceding year (vs. 8% and 3% in a city-wide survey of high school graduates). Twenty-six per cent had committed one of the crimes on the crime index; 24% reported having sold marijuana or other drugs. Current employment status was not related to the use of marijuana, but those who had been unemployed longer reported more use of alcohol and marijuana. Those usually short of money admitted to more property crimes than others; violent and property crime were fairly strongly correlated. Unemployment and labor difficulties as associated with self-reported crime and substance abuse, but not to violent crime. Unemployment seems more likely to lead to drinking and depression than violence The authors do not feel "strain theory" explains the findings, but "control theory" helps: the "lack of a job means the absence of controlling bonds to conventional society" (p. 435). Unemployed dropout males, having left the conventional activities of school, become part of a "somewhat marginalized world, a world where social controls of a job are absent, where peer group influences are strong, and where free time and boredom combine to increase the opportunities for and temptations to engage in deviant behavior" (p. 440).

Kupersmidt, J. B. & Coie, J. D. Preadolescent peer status, aggression, and school adjustment as predictors of externalizing problems in adolescence. *Child Development*. 61, 1350-2362, 1990. Funding: None indicated. Location: North Carolina, U.S.A.

Fifth grade children (n = 112, 69% white, 31% black, 53% male) were followed forward for seven years until the end of high school. The only significant predictor of juvenile delinquency . . . was aggression toward peers. Both aggression and frequent school absences were significant predictors of early school withdrawal.

Upchurch, D. M. & McCarthy, J. The timing of a first birth and high school completion. *American Sociological Review*. 55, 224-234, 1990. Funding: Not indicated. Location: U.S.A.

Using data from the U.S. National Longitudinal Survey of Youth which included data for a sample of 12,000 men and women interviewed in 1979 and 1986, the authors sought to assess the impact of early motherhood on young women's academic attainment. Of all women who had children before age 18, 55% completed high school, including 54% of white women, 61% of black women, and 37% of hispanic women. For women who had had no children by age 30, 96% had completed high school, including 97% for white women, 93% for black women, and 90% of hispanic women. They concluded that women "who have a baby while still enrolled in school and remain in school are just as likely to graduate as women who do not. Among high school dropouts, however, a birth reduces the chances of eventual graduation" (p. 224). In terms of the policy implications of these findings, they note, "The underlying assumption in many public policies and programs for adolescents is that young mothers would fare as well as their childless counterparts if only they would delay their first birth. Our results suggest this may be a serious oversimplification. . . . Our research suggests a need to develop a more general theoretical perspective on the timing of fertility, incorporating potential social advantages for early child-bearing among some groups of women" (p. 232).

Upchurch, D. M. et al. Reply: Childbearing and schooling: Disentangling temporal and causal mechanisms. *American Sociological Review*. 58(5), 738-40, October 1993. Funding: None. Location: U.S.

Reply to D. K. Anderson (1993) concurs that young mothers achieve less education than those who bear children later but argue the causes may be underlying social and economic factors, not the time of giving birth.

Windle, M. Substance use and abuse among adolescent runaways: A four-year follow-up study. *Journal of Youth and Adolescence*. 18(4), 331-344, 1989.

Funding: U. S. Department of Labor and others. Location: U.S.A.

Using data from the U.S. National Longitudinal Study of Youth collected in 1980 with a follow-up in 1984 (1254 males and 1157 females), the author related never runaway, runaway once, and repeat runaway a number of delinquency variables, including school dropout. Runaway rates differed according to gender and ethno-cultural group: white, 8.8% male vs. 11.2 female; black, 6.9% vs. 6.6%, hispanic, 8.1% vs. 13.5%. Dropout was closely related to runaway status: for males, 22% of never runaway had dropped out, vs. 42% for once runaway and 38% for repeat runaway; for females, dropout rates were 18%, 40%, and 47% respectively. The highest rates of drug abuse was reported for repeat runaways. Males consumed more alcohol and reported more alcohol problems, including aggressive behaviour, than females. Female repeat runaways were more likely to consume illicit drugs.

6. Dropout and part-time work

Barton, P. E. Earning and learning: *The academic achievement of high-school juniors with jobs.* Princeton, NJ: National Assessment of Educational Progress, 1989. Funding: U.S. Department of Education. Location: U.S.A.

Using data from a national sample, Barton analyses the relationship between part-time work and academic achievement, as measured by standardized tests, and reports a weak curvilinear relationship. Achievement is highest for students working a moderate number of hours per week, and lower for those not working at all or working an extensive number of hours. He suggests that selection bias rather than a cause-effect relationship may explain the relationship.

Charner, I. & Fraser, B. S. *Youth and work: What we know, what we don't, what we need to know.* Washington, D. C. William T. Grant Foundation, Commission on Work, Family and Citizenship, 1988. Funding: William T. Grant Foundation. Location: International, with U.S. dominant.

An extensive survey of the literature with a focus on developing a research agenda. They conclude that little is known about what youth learn on jobs; they question the findings of some researchers that work has a negative effect on youth by encouraging delinquent behaviour. They note many youth would like to work but lack the basic skills and attitudes necessary to be employable. Such individuals are over-represented among dropouts, and are frequently members of visible minorities in inner-cities.

Lawton, S. B. Part-time work and the high school student: Costs, benefits and future. Toronto: Unpublished manuscript, 1994. Funding: Employment

and Immigration Canada. Location: International with an emphasis on Canada and the U.S.

A synthesis of the literature focusing on the development of an understanding of the links between formal education, the youth labour market, and the skills, knowledge, and attitudes needed for employment. A failure to regulate student work adequately may mean that public dollars supporting education are wasted, but excessive regulation might encourage students to drop out of school in order to work. A number of U.S. states have moved to regulate the youth labour market more tightly, even though no studies have investigated the various relationships simultaneously.

Steinberg, L. & Dornbusch, S. M. *Negative correlates of part-time employment during adolescence: Replication and elaboration.* Madison, WI: National Center for Effective Secondary Schools, 1990. Funding: ? Location: California and Wisconsin.

Replicating earlier work, the authors report a set of negative effects of extensive part-time work, and conclude that hours worked has a negative effect on students' grade point average.

Stern, D., McMillion, M., Hopkins, C. & Stone, D. Work experience for students in high school and college. *Youth and Society.* 21(3), 355-389, 1990. Funding: National Center for Research in Vocational Education, University of California, Berkeley. Location: U.S.

In spite of potential negative effects of working part-time, one positive result that has been repeatedly demonstrated is that youth who work during high school are more likely to find jobs after leaving school, and to receive higher pay than those who have not worked previously. It appears, working in natural jobs imparts greater economic advantages to youth than do participating in school-direct co-op programs. Unfortunately, little research on co-op programs have taken into account he quality of the jobs in which youth are placed, and little is know about what useful knowledge youth learn in natural jobs, so we cannot as yet capitalize upon this relationship to improve the education of youth.

7. Dropout and school characteristics

Bryk, A. S. & Thum, Y. M. *The effects of high school organization on dropping out.* New Brunswick, NJ: Center for Policy Research in Education, Rutgers, 1989. Funding: U. S. Department of Education. Location: U.S.A. 34 pp.

Using the High School and Beyond data base's 1980 grade 10 cohort of 30,000 students, the authors selected a subsample of 83 Catholic high schools and 94 public high schools. Because of missing data, the final sample included 160 schools and 4,450 students. Both dropout and early absenteeism were used as dependent variables in a hierarchical regression model. At-risk measures were controlled using a composite variable and various demographic variables, independent variables included measures of teacher quality and interest in students, academic press, disciplinary climate, curricular differentiation and commonality, and social and academic background composition of the schools. They concluded that, "Students are more likely to persist to graduation in schools where there is an emphasis on academic pursuits, an orderly environment, and less internal differentiation. . . . [S]pecial benefits accrue to disadvantaged and at-risk youth from attending schools . . . [with a] committed faculty, orderly environment, and a school emphasis on academic pursuits. . . . An important structural feature - a smaller school size - also contributes to engaging the disadvantaged student" (p. 26).

Lawton, S. B., Leithwood, K. A., Batcher, E., Donaldson, E. L., & Stewart, R. *Student retention and transition in Ontario high schools: Policies, practices, and prospects.* Toronto: Ontario Ministry of Education, 1988. Funding: OMOE. Location: Ontario. 128 pp.; 21 tables; 5 figures.

A causal model of school-related factors influencing dropout is developed from the literature. Seven factors were identified and placed in a causal sequence: Goals, including by short and long term outcomes considered important for students to achieve (e.g., a "vision" of school conditions and student outcomes); Teachers, including relevant personal qualities, their view of the teacher's role, disposition toward students and toward collaboration with others; Administrators, including their basic beliefs, their selection and use of goals, strategies used to affect process that influence student success, and their decision-making process; School Policies and Organization, including school size, use of time, the amount of school-level discretion, and district support for school initiatives; Programs and Instruction, including curriculum content, degree of choice, articulation of program components, academic emphasis, and carefully planned instruction based on sound learning and assessment principles; School Culture, defined as a unique set of core norms, values and beliefs that are widely shared throughout the organization and focussed upon the student; School-community relations, including contact with parents, businesses, universities, labour, and other agents in the social and political milieu. Validating the model with survey data for 58 schools, the researchers found that school culture, teachers, programs and instruction, and school-community relations explained 55% of the variation in school dropout rates. Administrative and policy variables seem of lesser importance.

McKeown, B. et al. The point of view of the student in attrition research. *Canadian Journal of Higher Education.* 23(2), 65-85, 1993. Location: Canada.

The authors argue that college student attrition research is not sufficiently theory-based, and that extant research places too much emphasis on student integration with the college environment. They believe more attention should be paid to the meanings, goals, and priorities held by faculty and students.

Miller, S. E., Leinhardt, G., & Zigmond, N. Influencing engagement through accommodation: An ethnographic study of at-risk students. *American Educational Research Journal*. 25(4), 465-487, 1988. Funding: Handicapped Research and Demonstration Branch of Special Education Programs, U.S. Education Department. Location: U.S.

The authors suggest that the accommodating nature of the high school studied may be a central factor in its ability to maintain a low dropout rate. "This accommodation is described in terms of institutional, classroom, and interpersonal processes that reflect the school's responsiveness to the needs of students as those needs are perceived by various institutional actors. . . . [As a result there is] a modification of demands made on students and the provision of support for students to enhance their ability to meet those demands" (p. 465). However, they note that "accommodation may unintentionally limit students' levels of academic engagement and, because of its unintended negative side effects, ultimately limit the usefulness of students' school experiences" (p. 485).

Quirouette, P. Saint-Denis, O. & Huot, N. *Identifying probable school leavers in Ontario high schools*. Toronto: Ontario Ministry of Education. Ontario Ministry of Education, 1990. Funding: OMOE. Province: Ontario. 111 pp. + questionnaire.

The researchers developed the "School or Me?" questionnaire to identify students at risk of dropping out of school. The questionnaire has 53 items divided into eight areas: family characteristics, feelings of isolation, plans for future school, school work, self-confidence, absenteeism, need for help from teachers, and interest in school. Surveying 3,629 boys and 3,203 girls in 40 Ontario English-language high schools in the fall of 1987, they concluded that 34% of grade 9 students (36% of boys and 32% of girls) were at risk of leaving school early. Intervention programs, including individual counselling, group counselling, mentoring, and peer counselling, are suggested. Tabular data for each item are included along with five tables and 71 figures.

Quirouette, P. Saint-Denis, O. & Huot, N. *Dropouts in French-language schools*. Research Brief. Toronto: Ontario Ministry of Education. Ontario Ministry of Education, 1989. Funding: OMOE. Province: Ontario. 37 pp.; 23 tables.

This report summarized three years of work developing and applying the "School and Me?" questionnaire to the francophone schools in Ontario. In 1987, 34% of grade 9 francophone boys and 25% of francophone girls were at risk; for grade 10 students, 43% and 33% were at risk, respectively. In most schools, between 10% and 40% of all students were at risk, but in some schools 60% were at risk. Intervention programs, including individual counselling, group counselling, mentoring, and peer counselling, are briefly described. They report using teachers as mentors is the most popular intervention in the schools they have worked with.

Solberg, V. S. et al. Development of the College Stress Inventory for use with hispanic populations: A confirmatory analysis. *Hispanic Journal of Behavioral Sciences*. 15(4), 490-97, November 1993. Funding: ?. Location: U.S.

The study confirms the applicability of the CSI to hispanic students. Factor analysis generates three subscales: Academic Stress, Social Stress, and Financial Stress.

Stone, J. R. III. The success of school-to-work transition programs. Paper presented at the American Educational Research Association Annual Meeting, San Francisco, CA. April 20-24, 1992. Funding: National Center for Research in Vocational Education. Location: U.S.A. 22 pp.

The paper's objectives were "to place the problem of school-to-work transition in its proper context by examining sources of the problem. . . . to examine present and possible perspectives on what school-to-work transition means. . . to discuss the appropriate foci for assessing school-to-work transition programs. . . [and] to examine critical methodological issues." The paper discusses what schools should (but do not) teach that would be useful for gaining and holding employment. Several options are given for teaching what should be taught, including youth apprenticeships, technical preparation, cooperative vocational education, and school-based enterprises. The difficulty in assessing the effectiveness of programs is commented upon.

Tidwell, R. Dropouts speak out: Qualitative data on early school departures. *Adolescence*. 23(92), 940-954, 1988. Funding: Los Angeles Unified School District. Location: Los Angeles.

Interviews with 374 urban high school dropouts yielded the following list, in rank order, of best and worst features of high schools. Best: socializing, teachers, activities, counsellors, sports, elective classes, English-as-a-second-language classes, school spirit, clean campus, lunch hour, close to home, school atmosphere, homeroom, tutoring, no graffiti. Worst: teachers boring and not caring, crowded

classes, gang violence, cafeteria food, closed campus, peer pressure, dirty and dangerous restrooms, drugs on campus, graffiti, poor counselling, racial hostility, inconsistent rules, hassling on campus. "Although the subjects in this study placed a high value on education and learning, they had many complaints about school" (p. 953).

8. Intervention programs to reduce dropout

Agency for Instructional Technology. *A survey of the use of technology with students at risk of school failure*. Bloomington, IN: Agency for Instructional Technology, 1987. Funding: Agency for Instructional Technology, Canadian Education Association, and National School Boards Association (U.S.). Country: U.S.A. and Canada.

Survey data indicate similar levels of overall usage of technology in the U.S. and Canada, but that U.S. schools were more likely to use technology in distinct remedial math and reading instruction programs whereas Canadian schools were more likely to use technology "across the curriculum". U.S. schools were more likely to use multiple technologies, including video, than Canadian schools, which were more likely to use computers. About 100 profiles of programs are given in six categories: basic skills, dropouts, English-as-a-second-language, multiple/various target, record keeping, special education, and vocational education. Some Canadian examples are included: Student Support Services (City of York, Ontario), use of CHOICES computer guidance program (Saskatoon Catholic School Board), and Supervised Alternative Learning for Excused Pupils (SALEP) Life Skills Program (Peel Board of Education, Ontario).

Baizerman, M. & Compton, D. Toward an integrated, whole community model of dropout prevention. *Community Education Journal*. 20(4), 17-20, Summer 1993. Funding: ? Location: U.S.

The authors argue that dropout prevention programs need to involve the community to meet the needs of students and families. Parent and school-community involvement include parenting, communicating, volunteering, learning at home and representing other parents.

Baldwin, J. How the other half chooses. *Educational Leadership*. 29-30, December 1990/January 1991. Funding: None. Location: Shreveport, Louisiana.

The author, a night school vice principal, contrasts the severe control problems in day schools with the minor problems in a program "driven wholly by choice, with no attendance lines, no compulsory attendance law, and no attendance supervisors"

(p. 29). Noting dropouts actually want to be educated, he comments that, "Despite their occasional indifference, their seeming inability to conform to guidelines, and their often explosive tempers, they have bought into the idea that the only path to economic security is through the schools. . . . They leave their day schools for a variety of reasons--some fall behind their age group academically; some have trouble arranging for child care; some have to go to work to help their families out financially; quite a few simply cannot get along with the school administration or have trouble getting to class by 7:45 a.m. . . . I asked one young man who had previously attended the most prestigious high school in town why he had left. He replied that he like to fight and was therefore suspended most of the time. Of course, fighting is not allowed at the P.M. School either, and I asked why he had not pursued this interest since joining our program. His response was the people in P.M. School act like adults, and adults just don't fight in school . . . . I now believe that school systems will be forced to offer choices to students, especially those at risk who cannot conform to the organizational regimen of the typical secondary school" (p. 30).

Bauer, R. & Michael, R. They're still in school: Results of an intervention program for at-risk high school students. Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta, GA, April 12-16, 1993. Funding: ? Location: Georgia, U.S.A 21pp.

Project Success is a vocational education program for at-risk grade 9 and 10 students in one high school. It focuses on the competencies needed for occupation entry, adjustment, advancement in a vocational field, and on remedying deficiencies in reading, language, and mathematics. Also addressed are life adjustment and career seeking skills, positive study skills, psychological and social needs, and vocational interests. Students work with teachers to prepare a resume, complete job application, practice being interviewed for a job, and learn how to maintain and keep a job. Evaluation looked at test achievement, attendance, and student performance suing pre- and post-tests and teacher evaluations. By the second year, attendance, grades, attitude, and test scores had improved, and were apparently related to teacher competence.

Bloom, M. Profiles of partnerships: *Business-education partnerships that enhance student retention*. Ottawa: Conference Board of Canada, National Business and Education Centre, 1991. Funding: Conference Board of Canada. Location: Canada.

Thirty business education partnerships are described according to the partnership title, location, start date, partners, scope, number of sites, resources, groups served, goals, program description, activities, and results.

Catterall, J. S. An intensive group counselling dropout prevention intervention: Some cautions on isolating at-risk adolescents within high schools. *American Educational Research Journal*. 24(4), 521-540, 1987. Funding: Not indicated. Location: California.

An evaluation of a dropout prevention program involving 155 students in grades 10 to 12 found that the students who had participated in the intensive, 4-day counselling workshop experienced a higher dropout rate than those in the control group. Students were not assigned to experimental and control groups at random, but several covariates were used to remove the effects of initial differences. In interpreting the results, it is noted that according to data from the Wisconsin Youth Survey that was administered to the students, experimental group students formed into "an unusually cohesive homeroom group at the school" and "their perceived negative labelling by teachers was significantly higher than that of the control group members, and their social bonding to teachers was significantly lower than controls when measured 4 weeks after the workshop. . . . These observations suggest that the workshop may have resulted in a cohesive peer group within the school--a "gang" of a nonmalevolent sort--that looked to itself for sources of satisfaction in daily school life, but not to teachers or to regular school activities" (p. 534). They conclude that "group counselling alone is at best ineffective and perhaps detrimental to success in school for academically at-risk adolescents" (p. 536).

Cave, G. et al. *JOBSTART: Final report on a program for school dropouts*. Manpower Demonstration Research Corp., New York, NY, October 1993. 424 pp. Funding: ? Location: U.S.

The JOBSTART demonstration program provided education and vocational training at 13 sites to assist dropouts aged 17-21. A total of 2,312 persons were randomly assigned to the training or control group; data on 1,941 youth for whom four years of longitudinal information was available are analysed. JOBSTART participants were more likely to pass the General Educational Development examination or graduate from high school. Earnings for some subgroups were affected; on training centre had a very large impact on learning. There was little impact on youth's receipt of public assistance. Overall, the investment in JOBSTART was not repaid through increases in earning or other quantifiable benefits by the end of the four-year follow-up period.

Divine, K. P. & Whanger, R. E. Use of a computer learning laboratory with at-risk high school students. *Educational Technology*. June 1990, 46-48. Funding: Newport News Public Schools and State of Virginia. Location: Newport News, Virginia, U.S.A.

A prevention/rehabilitation program was developed for at-risk students, who were assigned on the basis of poor attendance but who usually had records of disruptive behaviour and low academic achievement. The program used a computer-based learning lab for improving writing skills. A random sample fifty students (from a target population of 500) were assigned to the treatment group, and were pre- and post-tested. Software included Skills Bank and Rightwriter; evaluation of their writing skills included a readability index, a strength indicator, and a descriptive index. Treatment groups improved in reading comprehension, language arts, and strength of writing, but not readability or use of descriptive adjectives in their writing. The authors believe the individualization, clear objectives, prompt feedback, and active role for students helped to make the program a success.

Francis, K. C. et al. Success in school: A research agenda on student attrition and retention in the SEEK program. *Educational Evaluation and Policy Analysis*. 15(4), 437-41, Winter 1993. Funding: ? Location: U.S.

The Search for Education, Elevation, and Knowledge (SEEK) program at Brooklyn College of the City University of New York creates interaction among students, staff, and faculty to enhance student assimilation into the institution's subculture.

Hamby, J. V. & Monaco, F. A. *Enhanced Vocational Education: Developing a district-wide dropout prevention program*. National Dropout Prevention Center, Clemson, SC. A Series of Solutions and Strategies, Number 7. September 1993. Funding: ? Location: U.S. 11pp.

The Enhanced Vocation Education (EVE) concept aims to 1) eliminate the educationally embarrassing general education track which leads students to an academic and vocational dead end, 2) improve the connection between school and work, 3) integrate academic and vocation curriculum to enhance the relevance of course content to work, and 4) make school more relevant, caring, responsive and student-centred for the large number of students not academically gifted or college bound. The suggested EVE curriculum includes applied academics, vocational-technical education, employability skills training, and life-development skills. Program elements include instructional strategies, student management and discipline, flexible scheduling, community collaboration, and parental and family involvement. The experience of the Pittsburgh school district in institutionalizing EVE is discussed.

House, J. D., & Wohlt, V. Effect of tutoring on voluntary school withdrawal of academically underprepared minority students. *Journal of School Psychology*. 29, 135-142, 1991. Funding: Not indicated. Location: Illinois, U.S.A.

A sample of 679 academically unprepared minority university students (Asian-American, black, latino) were followed for three semesters. Some participated in tutoring on a voluntary basis. Tutors were juniors, seniors, and graduate students in the disciplines they tutored and all had at least a B average. Tutors were trained in an 11 hour program which focussed on study skills, test-taking skills, reduction in math anxiety, and communications skills. Persistence rates for non-tutored students was 68% vs. 77% for tutored students. The differences by ethno-cultural groups were as follows: Asian-Americans, 81% vs. 83%; blacks, 68% vs. 77%; and latinos, 55% vs. 71%. It is noted that tutoring tends to be a cost-effective intervention.

Lawton, S. B., Leithwood, K. A., Batcher, E., Donaldson, E. L., & Stewart, R. *Student retention and transition in Ontario high schools: Policies, practices, and prospects.* Toronto: Ontario Ministry of Education, 1988. Funding: OMOE. Location: Ontario. 128 pp.; 21 tables; 5 figures.

To retain students, the authors suggest that changes in school cultures are necessary, and that change will probably have to be grounded outside the school--in the community, the school board, and provincial government. Changes in school-level policies called for include more variety in course scheduling and availability (including summer and evenings); better attendance monitoring; the maintenance of adequate but not "over-controlled" school order; sensible sanctions for misbehaviour; steps to overcome the negative impact streaming can have; better integration of general-level courses with specific college programs or other training/apprenticeship opportunities; better preparation for the world of work; and a stronger welcome to those from diverse cultural backgrounds in terms of the food served and recreational activities supported. At the school board level, they suggest that alternatives to streaming among schools be considered, that teachers and administrators be carefully selected in order to support change, and that more openness to the community be stressed. At the provincial level they suggest better data systems are needed to track students, changes in the system of streaming to require non-streamed courses in many subject areas (e.g., typing, Canadian government) where streaming is logically indefensible, an a blurring of the roles of high schools, community colleges, and universities by allowing high school students to earn credits in colleges and universities, and by allowing colleges to offer both Ontario Academic Credits (OACs) and first-year university courses.

Leonard, G. The end of school. *The Atlantic.* 269(5), 24-32. Funding: None. Location: U.S.

In this "Report and Comment", the author concludes that, "School as we know it is doomed." He suggests that calls for improvement in existing schools amounts to no more that calls for more of the same prescription that does not work. He describes

various innovations underway and suggests that what is needed is a "metaschool, a truly new educational entity . . . born from an imaginative combination of highly interactive technology with . . . nonfrontal, cooperative learning" (p. 32).

Mansbach, S. C. *Family literacy's approach to dropout prevention.* National Dropout Prevention Center, Clemson, SC. A Series of Solutions and Strategies, Number 6, April 1993. Funding: ? Location: U.S. 11pp.

A program for family literacy is used as early intervention to break the cycle of illiteracy perpetuated by parents' undereducation. Nontraditional incentives to participate in the program, which is aimed from pre-natal to age eight, include collaborative learning with parents, a "parent-friendly" location, and the child's insistence on wanting to participate.

Mayer, G. Roy. A dropout prevention program for at-risk high school students: Emphasizing consulting to promote positive classroom climates. *Education and Treatment of Children.* 16(2), 135-46, May 1993. Funding: ? Location: U.S.

A total of 200 grade 9 students with low marks and high absenteeism received tutoring services and their teachers were helped to make classroom environments less punitive. Results included better classroom climates, more student completing assignments, and lower dropout and suspension rates.

National Center for Education Statistics. *Education and the labor market outcomes of high school diploma and GED graduates. Indicator of the Month.* NCES, Washington, D.C., January 1994. Report NCES-94-404. Indicator extracted from "The Condition of Education, 1993", ED 357 513. Funding: U.S. Government. Location: U.S., 4pp., 2 tables, 3 graphs.

Compares those who complete regular high school and those who passed the General Education Development (GED) examination with those who do not complete high school. By 1990, youths with a GED were more likely to had attended either a third or fourth year of high school than other dropouts. Females who took advantage of a second chance to finish school usually had higher earning that those who did not, and those who finished high school or passed the GED before age 20 were more likely to find employment.

Newfoundland and Labrador Department of Education. *Dropout prevention.* St. John's: Division of School Services. ca. 1990. Funding: Government of Newfoundland and Labrador. Province: Newfoundland and Labrador. 35 pp. + four appendices.

A statistical profile of early school leavers is provided (age at leaving, last grade completed) and reasons for leaving are noted, including lack of interest (45%), difficulty with program (13%), employment (16%), pregnancy (11% of females), health (2%), home help (2%), and other (18%, including 5% going to school elsewhere). The bulk of the report focuses on factors affecting student retention and recommended intervention. Factors identified are school climate, curriculum, school policies and procedures, identification and intervention for at-risk students, parental involvement, student pregnancy, public awareness of the dropout problem, guidance services, and student support services. Appendix 1 describes a seven step school based prevention model: 1) staff meeting to discuss the issue, 2) study the problem in the school to determine the extent and nature of the problem, 3) develop early warning identification procedures, 4) develop plan for involving parents, 5) develop plan to deal with absenteeism, 6) develop and implement program to develop and maintain positive self-concept among students, and 7) develop program to remedy academic deficiency. Appendix 3 provides guidelines related to student pregnancy and Appendix 4 provides a list of commonly used indicators to identify students at risk of dropping out. The latter are divided into three categories: school related factors, family factors, and personal factors.

Nweze, B. R. Increasing parent involvement, student attendance and appropriate school behavior of at-risk middle school students through parent partnerships. Ed. D. Practicum, Nova University, 1993. 97 pp. Funding: ? Location: U.S.

Goals set for the practicum, applied in a rural area, were 1) to increase parent involvement in the day-to-day activities of the school, 2) to provide parenting classes in the school, 3) decrease discipline problems, and 4) increase student attendance. At enrolment, parents signed an agreement to volunteer their time and talents to the school. Evident were increased parent participation, fewer office referrals and suspensions, and a 63 percent decrease in absences. Other components included a parent support group, a student support group, peer leader training, and a designated parent room in the school.

Ontario Ministry of Education. *Student retention and transition: A selection of model programs - 1990*. Toronto: OMOE, 1989. Funding: OMOE. Location: Ontario. 93 pp. Bibliography.

Sixty model programs are described according to the following characteristics: program title, focus, target group, special features, starting date, students in program, contact person, school board, schools, telephone number, and program summary. Programs for francophone, anglophone, and Native students are included. Most have a career and skill development focus.

Otto, R. C. A visit to the high school of the 1990s: A whole new world. *NASSP Bulletin*. 99-102, January 1988. Funding: None. Location: NA.

A speculative piece about radical changes that may occur in the typical secondary school, include operation six days per week from 7:00 a.m. to 9:00 p.m., the replacement of books for students and libraries with electronic information sources on discs, classrooms that are student workrooms where individuals and groups work on unrelated projects, and computer monitoring of student progress through a complex array of assessment measures. Staff are paid on a profit sharing basis related to student accomplishment, and profits are earned for work undertaken by staff and students for local businesses. There is no longer a dropout problem because "exiting from the full-time instructional program to work or explore other interests is acceptable" (p. 102). Employers scan student records electronically when hiring, so there are no job opportunities for dropouts--youth attend to their schooling until they get a job, and work and study in a mix that suits them and their employer.

Punsalan, C. M. Gotta Have It! Pepsi challenges students to stay in school. *Vocational Education Journal*. 68(5), 2-31, May 1993. Funding: ? Location: U.S.

A Pepsi-Cola Company program provides students in inner-city districts with a scholarship credit of $250 for each semester they maintain a C average; mentor-teachers receive $1,000 for continuing education, classroom enhancement, or the mentoring relationship.

Roueche, J. E. & Roueche, S. D. Responding to the challenge of the at-risk student. *Community College Journal of Research and Practice*. 18(1), 1-11, 1994. Funding: ?. Location: U.S.

Based on a literature, the authors recommend a series of interventions including 1) pre-enrollment activities, 2) orientation programs, 3) basic skills assessment, 4) improved financial aid, 5) increased problem solving and literacy activities.

Texas Education Agency. *State plan to reduce the dropout rate, 1993-95*. Austin, TX., The Agency, May 1993. Funding: State of Texas. Location: Texas, U.S.A. 98pp.

An update on the state's progress in reducing its dropout rate, as mandated by the sate legislature. A progress report for implementation of the 1991 plan indicates actions taken, with and without fiscal implications. The number of dropouts has been declining, but ethnic minorities are still most likely to leave in

disproportionate numbers. Twenty recommendations are given.

William T. Grant Foundation. *States and communities on the move: Policy initiatives to create a world-class workforce.* Washington, D.C.: William T. Grant Foundation Commission on Work, Family and Citizenship et al., 1991. Funding: William T. Grant Foundation Commission on Work, Family and Citizenship. Nation: U.S.A. 47 pp.

After an overview of recent policy documents calling for improved education for a competitive work force, the report describes state-level initiatives under 10 headings: coordinated human resources investment planning bodies, school-to-employment transitions, student apprenticeship, technical preparation (Tech Prep), youth community service, employers as active partners in education and training, alternative learning centers, new pathways to postsecondary education, and creative funding mechanisms for human investment. The report is co-published by 14 organizations, including the U.S. National Center on Education and the Economy and the National Association of State Boards of Education. Virtually all of the programs identified address the question of keeping youth in school, attracting you'h to return to school, and the provision of alternative learning environments--alternatives to traditional high schools.

DROPPING OUT: A LITERATURE REVIEW

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November 1994

Part III: Bibliography

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